

Title (en)

Pour point depressant treated fatty acid esters as biodegradable, combustion engine fuels

Title (de)

Mit einem Stockpunkterniedrigtem behandelte Fettsäureester, als biologisch abbaubare Verbrennungsmotorkraftstoffe

Title (fr)

Esters d'acide gras, traités par un agent d'abaissement du point d'écoulement, comme carburants biodégradables

Publication

EP 0626442 B1 19990714 (EN)

Application

EP 94303590 A 19940519

Priority

US 6651993 A 19930524

Abstract (en)

[origin: EP0626442A1] A composition is described that comprises (A) esters from the transesterification of at least one animal fat or vegetable oil triglyceride of the formula <CHEM> with an alcohol R<4>OH wherein R<1>, R<2> and R<3> are aliphatic groups containing from about 6 to about 24 carbon atoms and R<4> is an aliphatic group containing from 1 to about 10 carbon atoms; and (B) a pour point depressant. In addition to components (A) and (B), the composition may also contain an additive (C) and/or (D) a normally liquid fuel.

IPC 1-7

C10L 1/02; **C10L 1/14**; **C10L 1/22**; **C10L 1/18**

IPC 8 full level

C10L 1/02 (2006.01); **C10L 1/14** (2006.01); **C10L 1/19** (2006.01); **C10L 1/16** (2006.01); **C10L 1/18** (2006.01); **C10L 1/22** (2006.01)

CPC (source: EP)

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Cited by

EP1972679A1; JP2007291391A; US8075804B2; WO2016188837A1; WO2016188839A1; DE10252714B4; EP1736528A3; US6409778B1; CZ305713B6; CN107660217A; CN112142906A; RU2475520C2; EP1847584A3; DE19529846A1; DE19529846C2; US10472442B2; US6468319B1; CN100392048C; FR2839315A1; EP2052061A4; CN107636030A; JP2018515661A; CN112142899A; WO2008065015A1; WO2008113757A1; WO2004044104A1; WO2007113035A1; US11066615B2; US9447342B2; US10793656B2; US9133409B2; US9212332B2; US11254885B2; WO2007102948A3; WO2007115844A1; WO03095593A1; JP2009542889A; WO0138461A1; WO2007076203A3; WO2016188850A1; US11104857B2; WO2008096187A1; US9422508B2; WO2016188858A1; US11001775B2; WO2005028597A1; WO0105912A1; WO9927037A1

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